

Supply Chain Management Strategy

Coursera- Supply Chain Management Specialization

Introduction

Medical Technologies Corporation (MTC) is a medical equipment manufacturing company with its headquarters in Collegeville, Pennsylvania.

The Affordable Care Act (ACA) implemented an excise tax on medical devices (2.3% of revenues) which is expected to drag down average industry profit margins, (8.8% of revenue in 2015) unless the industry finds a way to dampen the impact of the legislation.

Goal is to come up with costs savings large enough to cover the newly-imposed Affordable Care Act (ACA) Medical Device Excise Tax of 2.3% of revenue.

Objective

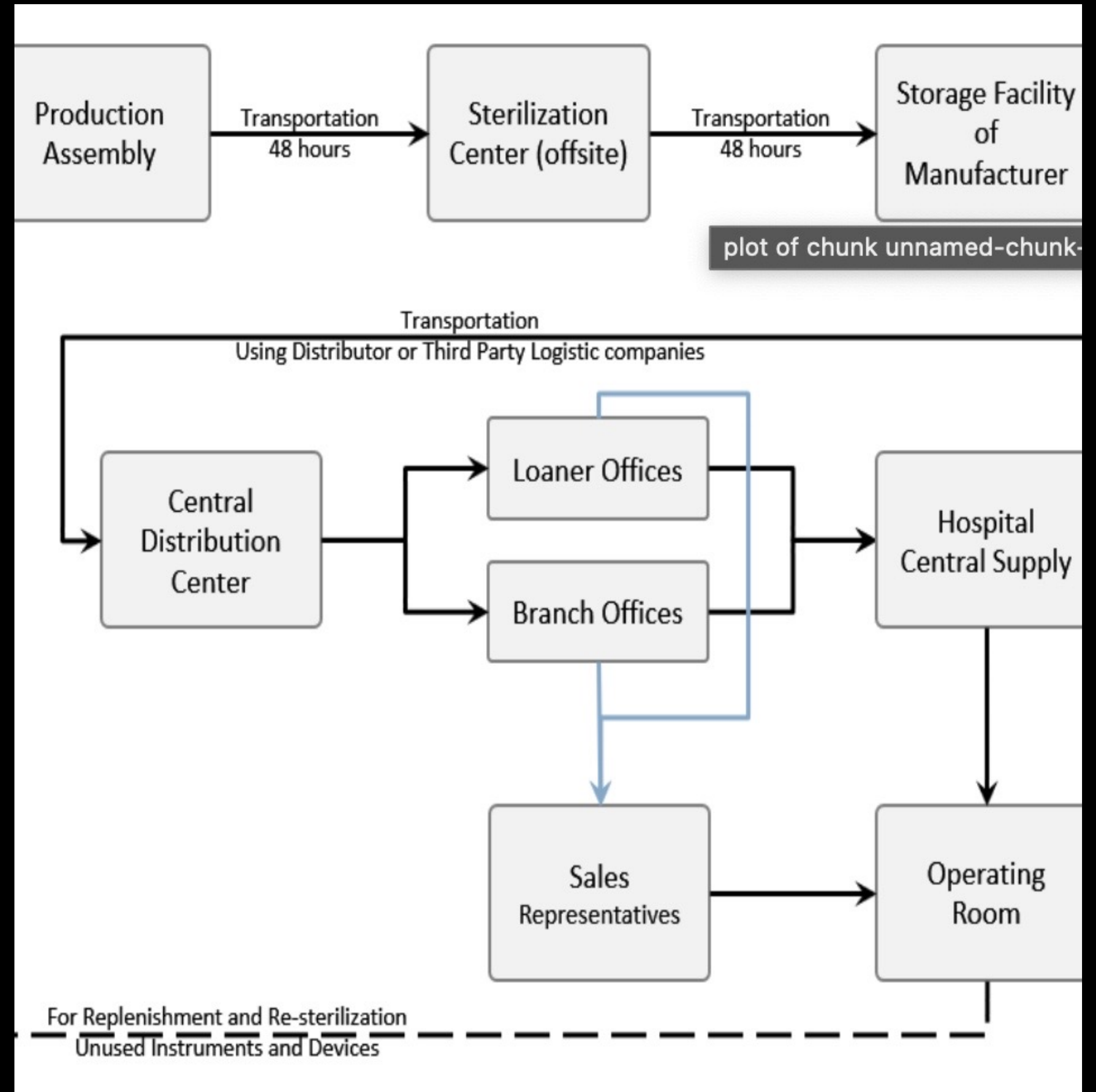
- To create a cost saving plan to reduce the impact of the newly-imposed Affordable Care Act (ACA) Medical Device Excise Tax of 2.3% of revenue.

	2010	2011	2012	2013	2014
Revenue	\$ 4,437.18	\$ 4,831.20	\$ 5,482.62	\$ 5,713.62	\$ 5,953.86
Cost of Goods Sold	\$ 1,441.44	\$ 1,508.76	\$ 1,855.26	\$ 1,835.46	\$ 1,964.82
Gross Profit	\$ 2,995.74	\$ 3,322.44	\$ 3,627.36	\$ 3,878.16	\$ 3,989.04
Research, development and engineering expenses	\$ 221.76	\$ 260.04	\$ 304.92	\$ 310.86	\$ 353.76
Selling, general and administrative expenses	\$ 1,653.96	\$ 1,786.62	\$ 2,079.00	\$ 2,287.56	\$ 2,683.56
Intangible amortization	\$ 23.76	\$ 38.28	\$ 80.52	\$ 81.18	\$ 91.08
Other	\$ 44.22	\$ 81.84	\$ 50.16	\$ 49.50	\$ 31.68
	\$ 1,943.70	\$ 2,166.78	\$ 2,514.60	\$ 2,729.10	\$ 3,160.08
Operating income	\$ 1,052.04	\$ 1,155.66	\$ 1,112.76	\$ 1,149.06	\$ 828.96
Other income (-expense)	\$ 19.80	\$ (14.52)	-	\$ (23.76)	\$ (29.04)
Earnings before income taxes	\$ 1,071.84	\$ 1,141.14	\$ 1,112.76	\$ 1,125.30	\$ 799.92
Income taxes	\$ 341.22	\$ 300.96	\$ 225.06	\$ 268.62	\$ 135.96
Net earnings	\$ 730.62	\$ 840.18	\$ 887.70	\$ 856.68	\$ 663.96
Note: all numbers in \$millions unless otherwise noted					

Stakeholders

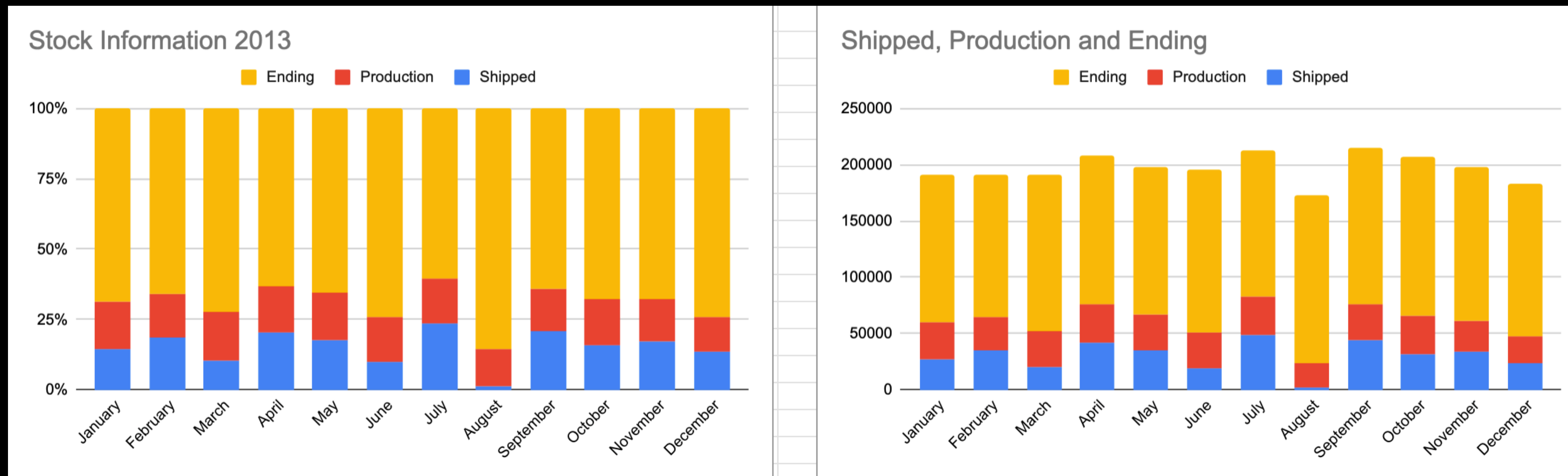
- MTC
 - Board of Directors
 - Sales Representatives
- Distributors
- 3PL
- Hospital Group Purchasing Organisations
- Doctors and Hospital Administration

Logistics Network



Planning

- Insight into the production, shipped and start-end levels of MTC for 2013 and 2014
- Making inferences from the charts, we can deduce that the initial inventory is quite high and in comparison the shipped quantity is low leading to high inventory levels.
- These levels also see an increase due to higher production values than shipped values.
- These high inventory levels are unnecessary and should be reduced effectively and production should be reduced till satisfactory inventory levels are achieved.



Supply Chain Sourcing Solution

- MTC should be a strategic supplier for major hospital groups since this means an establishment of trust in their logistics and supply chain network and the ability of MTC to provide excellent delivery and products without lags.
- Behaviour of Strategic Suppliers:
 1. fast delivery times
 2. fast issue response and problem redressal times
 3. high levels of mutual trust
 4. high quality of products
 5. no delivery lags and issues
 6. collaboration with customer on delivery requirements
 7. bonuses/ incentives and discounts for strategic partners

Off site sterilisation strategy: Pros and Cons

- Off-site
 - One large site that is centrally supervised leading to better output and operations
 - high transportation costs, delivery delays and lags. Not readily available products.
- On-site
 1. smaller sites
 2. large number of smaller sites and low control on output
 3. large labour costs on multiple sites
 4. fast response times
 5. readily available products
- MTC should use a hybrid strategy where on site sterilisation should be used with strategic partners and off-site should be used for all other customers

Thank you.